

U.S. Patent Application Serial No. 10/807,516
Amendment filed October 20, 2005
Reply to OA dated July 27, 2005

REMARKS

Claims 1 - 5 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicant regards as his invention. The applicant respectfully submits that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated July 27, 2005.

Claims 1 - 5 are currently pending in this application.

It is noted that a certified copy of the priority document has not as yet been filed. Because the claimed foreign priority is desired by the applicant, the applicant respectfully submits herewith a certified copy of the priority document.

The Examiner objects to the drawings because they, according to the Examiner, fail to show the reamer main body (8), the rod connection portion (24), the rod (3), the cover (74) the coupling structure (7) and clearance (79) in the configuration as claimed. The Examiner states that the applicant has shown the claimed subject matter as components, but has failed to show the invention as described in the specification, and any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing.

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The applicant respectfully requests reconsideration of these objections.

The applicant submits that Fig. 1 shows all of the components recited by the Examiner in the objection, except rod (3). Accordingly, in order to overcome this objection, the applicant submits annotated and replacement sheets of drawings showing a rod (3) attached to the screw hole (26) at the far right of the drawing. With the added rod (3), viewing Fig. 1 along with Fig. 3 should provide a clear understanding of how the claimed reamer apparatus functions.

Also, the applicant submits herewith annotated and replacement sheets of drawings indicating that Figs. 9 - 11 illustrate conventional art by having Figs. 9 - 11 labeled as "Prior Art".

The applicant respectfully requests that the drawings submitted herewith be approved by the Examiner, and that the outstanding objections to the drawings be withdrawn.

Claims 1 and 5 are rejected under 35 U.S.C. §102(b) as being anticipated by Nowak (U.S. Patent No. 5,580,188). The applicant respectfully requests reconsideration of this rejection.

With regard to claim 1, the Examiner alleges that Nowak discloses a substantially hollow (60) conical reamer main body (45), which diameter reduces towards a drawing side; a rod connecting portion provided at a narrow diameter end portion of the reamer main body and

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connected with a rod (40); and a coupling structure provided on an opposite side of the rod connecting portion, wherein the coupling structure has a swivel joint (48) that allows rotation of the reamer main body with respect to the buried pipe, and a main portion of the swivel joint is substantially accumulated in the reamer main body.

The applicant respectfully disagrees with the Examiner's position on Nowak. Referring to Fig. 2 of Nowak, the swivel joint (48) is clearly positioned outside of the reamer body, and it is not "accumulated in" the reamer main body, as presently recited in the applicants' claims. In Fig. 2, reference number (55) denotes an earthen channel. The alleged main body ends at the vertical line defining the right side of the earthen channel (55). The swivel joint (48) is clearly entirely outside a hollow of the main body (45), which would end as its left end which is indicated by the noted vertical line.

With regard to claim 5, the Examiner alleges that the reference discloses the apparatus (45) having a substantially hollow conical reamer main body (45) which diameter reduces towards a drawing side; wherein a partitioning member is disposed in the vicinity of an aperture of the reamer main body on a side of a buried pipe (40), a passage is formed within the reamer main body (45) through which drilling fluid (62) is supplied for injecting the drilling fluid to a portion to be drilled through emission ports (47), and an injection tip is provided at the partitioning member through which the drilling fluid that has entered the passage is discharged to the side of the buried pipe.

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Again, the applicant respectfully disagrees with this Examiner's characterization of Nowak.

The Examiner recites a partitioning member in the details of the rejection, but does not refer to a reference number. In the applicant's review and study of the drawings and specification of Nowak, there is no partitioning plate disclosed therein.

Thus, the applicant's claimed invention, as now recited in independent claim 5, is not anticipated by the teachings of Nowak.

In view of the above, the withdrawal of the outstanding anticipation rejection under 35 U.S.C. §102(b) based on Nowak (U.S. Patent No. 5,580,188) is in order, and is therefore respectfully solicited.

Claims 2 - 4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nowak in view of Elorriaga, Jr. (U.S. Patent No. 4,478,438). The applicant respectfully requests reconsideration of this rejection.

The outstanding Action alleges that Nowak discloses a reamer comprising a connector rod, swivel connection, and fluid emission ports as applied to claims 1 and 5 above. In addition, according to the outstanding Action, Nowak discloses a clearance between an end portion of the cover on the buried pipe side. However, Nowak fails to disclose the swivel joint sealed by a floating

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seal, a cover for preventing intrusion of sediments surrounding the coupling structure, wherein an end portion of the cover is plunged into the reamer main body. The Action then alleges that Elorriaga, Jr. discloses a swivel joint assembly (10) that is sealed by a sealing member (60) having a cover (84) for preventing intrusion of sediments while a clearance is formed between the end portion of the cover (16) for preventing intrusion of sediments on a side of the male piping section; the cover (16) being capable of being sized in that an end portion thereof on the reamer main body side is plunged into the reamer main body. The Action states that Elorriaga, Jr. suggests that a seal and cover configuration is useful to prevent leaking of bearing fluids and to prevent dust and other formation elements from contacting the bearings.

The applicant submits that the outstanding Action mischaracterizes the swivel joint of Elorriaga, Jr., which is used for connecting open ended male and female pipe sections for conveying high pressure fluids, such as encountered in the petroleum industry. That is, the swivel joint of Elorriaga, Jr. does not have any relation to the “floating seal” of claim 2 (which has a rotating side and a non-rotating side which are sealed), or the “cover” of claims 3 and 4 (which is attached to the reamer main body and encompasses an outer peripheral side of the coupling structure). Neither the claimed floating seal or the claimed cover for use with a reamer apparatus is disclosed or suggested by the swivel joint for pipes disclosed by Elorriaga, Jr.

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In view of the above, even if, *arguendo*, the teachings Nowak and Elorriaga, Jr. can be combined in the manners suggested by the Examiner, such combined teachings would still fall far short in fully meeting the applicant's claimed invention, as now recited in the claims filed herewith. Thus, a person of ordinary skill in the art would not have found the applicant's claimed invention obvious under 35 U.S.C. §103(a) based on Nowak and Elorriaga, Jr., singly or in combination.

Accordingly, the withdrawal of the outstanding obviousness rejection under 35 U.S.C. §103(a) based on Nowak (U.S. Patent No. 5,580,188) in view of Elorriaga, Jr. (U.S. Patent No. 4,478,438) is in order, and is therefore respectfully solicited.

In view of the aforementioned amendments and accompanying remarks, claims, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, the applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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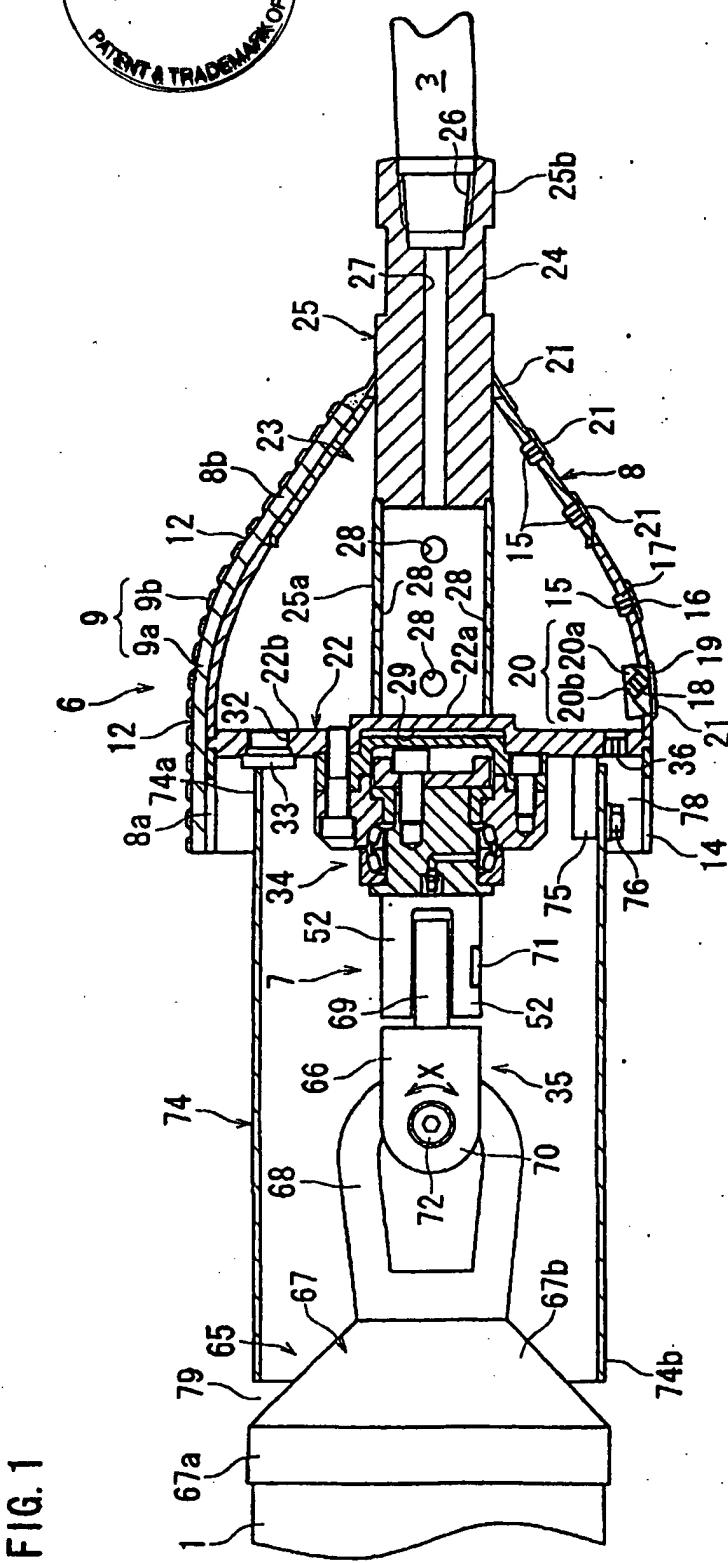
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PATENT TRADEMARK OFFICE

Enclosures: Replacement Sheets of Drawing (Figs. 1 and 9-11)
Annotated Sheets of Drawings (Figs. 1 and 9-11)
Claim for Priority

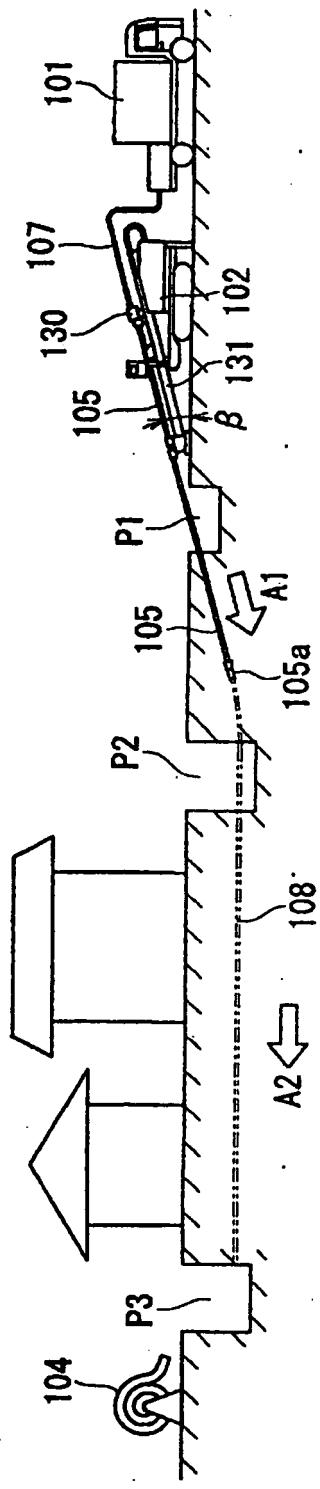
1 / 11



EIGHT

FIG. 9

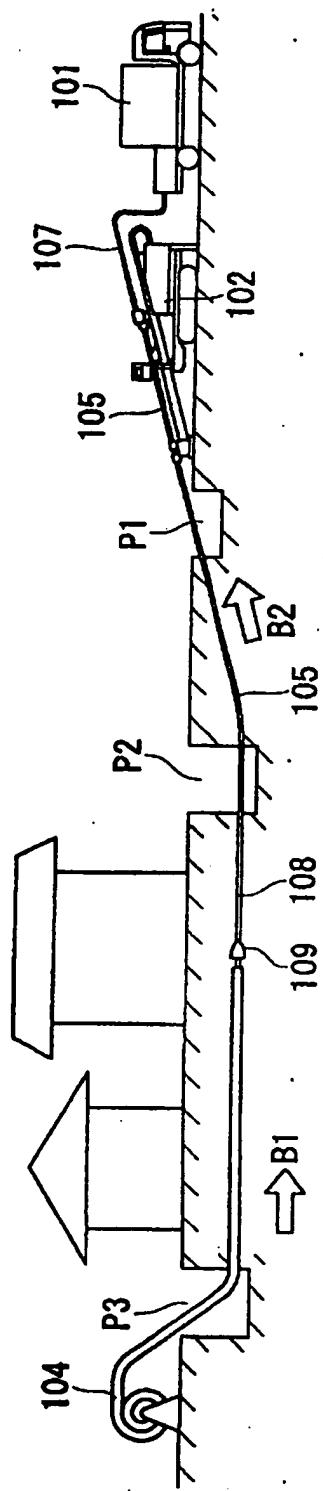
PRIOR ART



10/11

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FIG. 10
PRIOR ART



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FIG. 11

PRIOR ART

